

Relationship between Project Governance and Project Performance: A Multiple Case Study of Shutdown Maintenance Projects in a Maritime Environment

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Introduction

The paper will first describe the background to this research. It will then present a brief literature review of corporate governance and project governance. The research question to be undertaken in this study will then be identified from the gaps found in the literature; the paper will then explain the case research methodology to be adopted along with data collection methods. As the research is in an early stage, some initial observations are presented. More findings are expected to be presented at the PMI Congress.

In the context of corporate governance, the need for increased organizational and individual accountability has occurred through the collapse of corporations to conduct business transactions in an ethical and responsible manner. Globally, governments have responded to major corporate and accounting scandals through enacting legislation – US Sarbanes-Oxley Act 2002 (SOX), Australia's Corporate Law Economic Reform Program Act of 2004 (CLERP 9) and changes to The Companies Act 1985 in the UK and European Union Directives (Turbit 2005; Weaver 2005). While corporate governance has a longer history, during the past decade awareness of project governance has been increasing (Abednego & Ogunlana 2006; Crawford & Cook-Davies 2005; Hazard & Crawford 2004; Miller 2005; Pryke & Pearson 2006; Turbit 2005; Turner & Keegan 2001).

Given that many high-profile projects have failed, it appears that some organizations are still experimenting with the concept of project governance and exploring its relationship to project performance. Therefore, there is a need for deeper understanding of what constitutes effective project governance.

Brief Literature Review

Corporate Governance

Corporate governance takes into account both internal controls and external corporate relationships. The approach to governance is critical in setting direction, monitoring performance and responding to external pressures.

Exhibit 1 summarizes the development of the theories of corporate governance in the Anglo-American countries, which influence Australian practice upon which this research focuses.

Theory Name	Summary
Agency	Views the firm as a set of contractual relationships between the owners as 'principals' and the directors of the firm as their 'agents'.
Transaction cost economics	Closely related to the agency theory this view incorporates the notion of a series of contracts among various players to overcome the limitations of a single contract between the agent and the principal. The set of contracts is a governance structure that corrects any misaligned actions.
Stewardship	Stewardship Theory proposes that optimum governance structures can nullify the inherent conflict of interest between

	owners and managers. Accordingly, company directors are regarded as stewards of the company's assets who will act in the best interests of the shareholders. Stewardship Theory is informed by theories of motivation, power and situational factors such as management philosophy and culture.
Stakeholder	Stakeholder Theory pays equal credence to both internal and external stakeholders – employees, managers and owners as well as financiers, customers, suppliers, governments, community and special interest groups.
Corporate Social Responsibility	This entails a more integrated approach with the aim of promoting social and environmental responsibility as opposed to shareholders alone. The realization that a narrow concept of corporate governance has resulted in social and environmental irresponsibility has prompted policies of corporate social responsibility and socially responsible investment.

Exhibit 1 – Development of Corporate Governance Theories

Source: (Clarke 2004, 2007; Mallin 2004, 2006).

One of the effects of globalization is the drive towards convergence of corporate governance regulations around the world. While the Organisation for Economic Cooperation and Development (OECD) accepts that there is no single model of corporate governance, and developed a set of shared or common principles of corporate governance. OECD defines corporate governance as 'a set of relationships between a company's management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance is determined' (OECD 2004, p 11). In Australia, the Australian Securities Exchange's (ASX) Corporate Governance Council addresses issues of corporate governance (ASX 2007). According to ASX (2007, p 3), corporate governance is the 'framework of rules, relationships, systems and processes within and by which authority is exercised and controlled in corporations. It encompasses the mechanisms by which companies, and those in control, are held to account. Corporate governance influences how the objectives of the company are set and achieved, how risk is monitored and assessed, and how performance is optimized'.

While the OECD principles cover a company's responsibility towards stakeholders, the ASX seems to focus on the shareholders. The ASX principles also reflect the reaction to recent excesses of CEO compensation that has disaffected shareholders in Australia. Exhibit 2 shows a comparison between OECD's Corporate Governance Principles and Core Principles of Corporate Governance in Australia.

OECD Principles	ASX Principles
Ensuring the basis for an effective corporate governance framework	Lay solid foundations for management and oversight
Rights of shareholders and key ownership functions	Respect the rights of shareholders
Equitable treatment of shareholders	
Role of stakeholders	
Disclosure and transparency	Make timely and balanced disclosure Safeguard integrity of financial reporting
Responsibilities of the Board	Structure the Board to add value
	Promote ethical and responsible decisions making
	Remunerate fairly and responsibly
	Recognise and manage risk

Exhibit 2 – Relationship between OECD's Corporate Governance Principles and Core Principles of Corporate Governance in Australia

Source: (ASX 2007; OECD 2004).

Does corporate governance leads to good performance? This is an important question in the light of recent corporate collapses. Based on various studies carried out by banks, consultancies and universities, the International Finance Corporation (IFC), an arm of the World Bank, states that well-governed companies attract premium valuations in OECD and emerging market countries, make banks and rating agencies see companies in

a better light, perform better due to improved operations and have better access to IFC (IFC 2007). However, Clarke (2007) and Mallin (2004) state that despite a great deal of research the evidence is not clear and correlating performance to governance is not that straightforward.

Project Governance

Since the 1950s, project-based methods have emerged to deal with unique, novel and transient operations (Bresnen et al. 2005b; Partington 1996; Pellegrinelli 1997; Turner & Keegan 2001; Wickenberg 2004). Yet, it is only during the past decade that the awareness of project governance has been on the increase in both private and public sectors (Abednego & Ogunlana 2006; Crawford & Cook-Davies 2005; Hazard & Crawford 2004; Miller 2005; Pryke & Pearson 2006; Turbit 2005; Turner & Keegan 2001). The project management literature on governance reveals that the term is used in a variety of ways and has a variety of meanings (APM GoPM Specific Interest Group 2005; Crawford & Cook-Davies 2005; Hazard & Crawford 2004; Turbit 2005). Governance is generally understood to encompass authority, accountability, stewardship, leadership, direction and control (Australian Government 2006). As a mode of organizing transactions, project governance presents as a multidimensional phenomenon, encompassing the initiation, termination and maintenance of the ongoing relationships between a set of parties (Heide 1994). From the literature on corporate and project governance there appear to be some common terms, such as accountability, authority, relationships, controlling and monitoring.

However, governance is more than a controlling process. Rather it presents as an authoritative oversight to monitor compliance, is influential in mitigating risk and provides guidance and direction (Moldoveanu & Martin 2001). Corporate governance can focus on ethical values and moral choices that honour the citizenship role of organizations (Caldwell 2004). Project governance, on the other hand, is project-focussed, describing how the project management processes are governed throughout the project lifecycle (Turner & Keegan 2001; White 2001; Winch 2001). Therefore, one needs to consider whether there is a difference between project governance and project management.

Carver (2001b) describes the relationship as one of ‘governors’ being in control and ‘managers’ being optimally empowered. In addition, the governance function has a closer link to ownership than it has to management (APM GoPM Specific Interest Group 2005; ASC 2007; Carver 2001b). In general, governance could be thought of as establishing and employing power, subject to the overarching goal of coordinating actors’ efforts (Heide 1994) or in the context of projects, building consensus necessary to achieve an objective in an arena where many different interests are in play (de Alcantara 1998). In the project environment, governance mechanisms are needed to support the operational control processes, and to manage the interface between project teams and their clients (Coles et al. 2001; Henisz 2006; Hyvari 2006a; Turner & Keegan 2001). In other words, project governance provides the structure through which the objectives of the project are set, the means of attaining those objectives determined and the means of monitoring performance are determined (Turner 2006).

To that end, project governance may be viewed as the framework, which enables the project management function to deliver the benefits of the project; and an assessment of the project performance leads to an understanding of the effectiveness of the project management.

Research Question

This study seeks to discover how project governance may contribute to project performance in a maritime project environment. It will do so by revealing where the concept of project governance is situated in the structure of the organization. Specifically, the study will explore the role of project governance in relation to the project performance of selected shutdown maintenance projects in a maritime environment. A set of sub-problems also require investigations to help address the main research issue.

Research Methodology

A multiple case study methodology (Yin 2003) will be used. Several projects from within the organization will be selected. Furthermore, in accord with Yin's (2003) characteristics of case study research, the study aims to go beyond simply exploring certain phenomena in selected shutdown maintenance projects to gaining an understanding of the phenomena within the context of a maritime environment.

Abednego's (2006) modified governance framework, Exhibit 3, is helpful in explaining the theoretical foundation for the research. Using deductive logic it is reasonable to infer a relationship between project governance (A) and project management (B); and a relationship may be inferred between project management (B) and project performance (C). Therefore, it is reasonable to hypothesize that a relationship also exists between project governance and project performance.

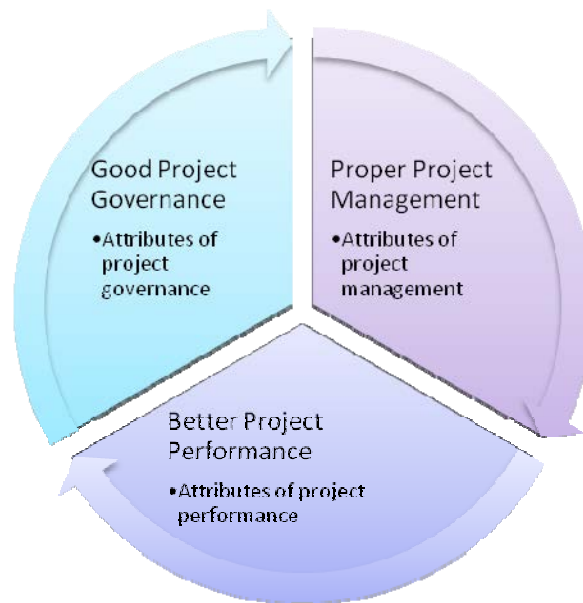


Exhibit 3 – Theoretical relationship of the research

Source: Adapted from Abednego 2006.

In summary, the intended research methodology for this project is:

Philosophy – Phenomenological (Interpretivist)

Approach – A mix of inductive and deductive

Strategy – Case Study

Time Horizon – Longitudinal

Data collection method – Secondary Data, Observations, Interviews and Questionnaires

Characteristics of Case Study Environment

The case study at the focus of this research is an Australian public sector organization. It comprises five corporate divisions, each of which is divided into more than twenty business units known as system program offices. The business units are responsible for the acquisition of new maritime projects as well as sustaining and supporting the firm's asset base. Under constant scrutiny, the importance of effective project governance to this organization and its agencies cannot be overemphasized. The research study will focus on one division, which has recently implemented a system of project governance to improve the planning and implementation of its shutdown maintenance projects. Project governance is a relatively new concept for this organization.

Researcher's Background

Since 2002, the researcher has filled two roles within the parent organization which is the focus of interest for this research. Firstly, as Superintendent Maintenance Engineering, he was accountable for the in-service support and sustainment of fixed and mobile heavy plant and machinery and, since 2004, he has been performing the role of Project Superintendent – Commissioning and Shutdown Maintenance. In this latter role, he is accountable for the end-to-end planning, procurement, production and post-production phases for implementing shutdown maintenance of fixed and mobile heavy plant and machinery. He coordinates the efforts of 15-20 multi-functional and multi-disciplinary technicians, subject matter experts, sub-contractors and junior engineers. The project length is typically 50 weeks and, depending on the maintenance cycle, the production period is either 4, 15 or 25 weeks. Project budgets can range from \$AU3M-\$AU20M.

An interest in project performance first developed in 1996 when he was accountable for implementing the parent organization's ship repair program in Western Australia. Following the parent organization's re-organization in 2003, one outcome was an increased focus on improving project performance and implementing project governance. This renewal initiative was the catalyst that began the researcher's journey to explore the relationship between project governance and project performance of ship repair and refit projects.

Some Initial Findings

Project Summary

The duration of shutdown maintenance projects selected for this case study is less than 50 weeks, which includes planning, production, commissioning and closure. Every nine months there is a 4-week shutdown maintenance period and every 36 months there is a 15-week shutdown period for each of the system program office's (SPO) eight maritime assets. Five of the assets are in Perth and three in Sydney. Procurement of goods and services for the project's production is via a restricted tender process, which results in a fixed price contract.

Project Environment

The planning and conduct of shutdown maintenance is a complex and expensive operation involving many stakeholders in a dynamic environment. So that the complexity and expense can be addressed in a uniform and replicable manner, the SPO's shutdown maintenance activities are managed as a project. In addition, the shutdown maintenance has to comply with the end user's technical regulatory system. Project management methodology version 2 (PMMv2) is the mandated methodology for these projects and it has been refined to meet the parent organization's particular circumstances.

At the top of the project governance structure, members of the asset repair and refit governance board operate out of Canberra and Sydney. The Project Executive Board (PEB) and elements of the Integrated Project Team (IPT) operate from the SPO in Perth. For the Sydney-based assets, the project superintendent, project manager, procurement specialists, logistics support and end user operate locally. The production site for the Sydney assets can be Brisbane, Newcastle, Sydney, Melbourne or Adelaide. The production phase for the assets in Western Australia is effected in Perth. The IPT is only physically collocated on site when the project enters the production phase. During other project phases the team has virtual meetings online and communicates through emails and telephone conferencing. The Project Governance structure of shutdown maintenance projects is summarized in Exhibit 4.

Project Governance layer	Description
Asset repair and refit governance board	In the context of operational and technical requirements and industry capacity, the board provides strategic guidance and direction to the SPO. Sponsors the asset repair and refit policy.
Project executive board (PEB)	Is comprised of the SPO director and representatives of the end user and logistics support groups. The asset's operations manager and other subject matter experts may also attend the PEB by invitation. Responsibilities include overall leadership, control and broad direction of repair and refit projects.
Project leadership team (PLT)	This team is comprised of the deputies of the PEB and: Facilitates project stakeholder involvement; Maintains oversight of the issue and risk management status; Ensures effective and complete closeout of individual projects, approval of post-project analysis, contract review and project closure reports; Ensures implementation of lessons identified from projects and management of any follow-on actions; Maintains oversight of project assurance processes and outcomes; and Manages continuous improvement of the overall repair and refit of project management processes.
Project Superintendent	Is appointed by the PEB and is accountable for: Managing the IPT; Implementing the project management plan; Monitoring and controlling project risks and issues; Ensuring overall project performance; Ensuring technical compliance; and Maintaining resource requirements.
Integrated Project Team	Is made up of representatives from the stakeholder organizations – these are fulltime positions seconded for the period of the project and include a project manager, maintenance planner, project stores coordinator, contract manager, maintenance manager, in-service support representatives, and quality control and compliance manager.

Table 3 Project governance structure for shutdown maintenance projects

Source: developed for this research.

Some initial observations of the SPO's project governance

Complexity in governing the project's operations derives from lines of communication, which are very complicated and difficult to understand, and can be described as almost chaotic. Some parts of the parent organization and the SPO are arranged around matrix lines, other areas have flatter structures. The project's planning phase is well structured and well documented; role clarity is documented and understood. Project implementation commences with the procurement cycle. Here the policy is well structured but the implementation of the policy is complicated because of overlapping of roles, a proliferation of roles and a lack of propensity to think beyond the immediate area of responsibility. There is a 'need to know' mindset because of commercial issues and a disinclination to share information. The regional contracts manager (this is a bottleneck) controls information distribution – this issue will be resolved when the function is absorbed by the SPO. At the production phase, the losing line managers for some members of the IPT are unenthusiastic to release control of their people to the project superintendent.

Some roles are duplicated and, in some areas, effective use of the delegations is not taking place. Power (control) distribution is disjointed – roles, which should have authority, do not necessarily have the authority commensurate with their role in the project – accountability is ambiguous. For example, the project superintendent is accountable for the project outcomes but has no financial or technical delegation. Contract

administration and contract management rests with the project manager who reports to the project superintendent and matters beyond the project manager's financial delegation are elevated to the PLT for approval. This situation is a result of the project superintendent being an external consultant and although there is a policy in place, which makes provision for consultants to have financial delegation, the policy is not enacted.

When things go wrong, where do they go wrong?

This is best described in the context of the project's administrative functions. Authority for operational tasks (deciding what projects should be done and when) is at the tactical level (the PEB); the project superintendent has no control or authority over the approval and phasing of projects. Albeit the project superintendent has some input, the authority for executive tasks (deciding who carries out the tasks and how) rests at the functional levels within the SPO. Likewise, while the project superintendent only assists functional managers in coordinating interdepartmental decisions, authority for resource maintenance tasks (procurement and maintenance of departmental resources both people and material) resides at the functional level within the SPO.

Therefore, things tend to go wrong when:

1. Actors are seconded to the project team and their line managers still control the actor's contribution to the project – line managers govern the scope of effort for some team members. This creates a source of conflict between the project superintendent and the line manager.
2. Some stakeholders do not recognize the delegated authority of the project superintendent.
3. Some actors do not make themselves aware of their obligations (the obligations which their management have signed up to) under the project charter.
4. Actors continue to operate in a 'business as usual' paradigm.

Notwithstanding this, in a recent shutdown maintenance project whose production phase was 26 weeks, assessment of the project's success and the project management's success was favourable. The asset's baseline capability was restored and the asset started its operational cycle as planned. However, the variables that might account for a perception of success in such a project are many. Project management success might have been related to other factors, such as the high motivation levels and experience of the project staff involved or the level of quality control applied to production tasks. These other factors may serve to mask any inadequacies in the governance structure, especially impacts that might result from the complex communication structure. Theoretically, a governance structure should be robust enough to support less experienced as well as highly experienced project staff. An investigation which explores all of these interrelated contributing factors, will contribute to a more detailed understand of the role of the governance structure in these kinds of projects.

Conclusions

To our knowledge, few researchers have explored the relationship between project governance and project performance by examining the relationship between project governance and management and project management and performance. A multiple case study method will be used to discover how project governance may contribute to project performance in a maritime project environment. It will do so by revealing where the concept of project governance is situated in the structure of the organization. Specifically, the study will explore the role of project governance in relation to the project performance of selected shutdown maintenance projects in a maritime environment of an Australian public organization.

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